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## ABSTRACT

Due to the current legislative trend toward competency-based education, and the accompanying minimal competency testing, a variety of local school districts and state education agencies are concurrently developing programs to meet the standards set by their state's legislation. This selective bibliography was compiled in order to aid those involved in such activities. It is based on computer searches of the Educational Resources Information Center, National Technical Information Service, Psychological Abstracts, Exceptional Child Education Abstracts, and Dissertation Abstracts. The 28 cited documents which were selected from those searches provide some examples of what has been done in this area, and some discussions of the problems and questions that must be faced. Each citation includes an abstract. (BW)

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# MINIMAL COMPETENCY TESTING

MINIMAL COMPETENCY TESTING

Issues and Procedures

An Annotated Bibliography

Compiled by

Barbara M. Wildemuth

July 1977

## PREFACE

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## ABOUT THE BIBLIOGRAPHY

The current legislative trend toward competency-based education, and the accompanying minimal competency testing, has created a situation in which a variety of local school districts and state education agencies are concurrently developing programs to meet the standards set by their state's legislation. This selective bibliography was compiled in order to aid those involved in this activity. It is based on computer searches of ERIC, NTIS, Psychological Abstracts, Exceptional Child Education Abstracts, and Dissertation Abstracts. The cited documents were selected from those searches in an attempt to provide some examples of what has been done in this area, and some discussions of the problems and questions that must be faced.

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All entries are listed alphabetically by author and are numbered.

An abstract, or in the case of most journal articles, a shorter annotation, is provided for each entry. A subject index consisting of ERIC descriptors and identifiers reflecting major emphasis is also provided.

Numbers appearing in the index refer to entries.

1. Acheson, Keith, A. Developing Competency-Based Graduation Requirements: Tips and Guidelines. Thrust for Education Leadership, Vol. 5, No. 2, pages 10-12, November 1975. EJ 137 181.

A school district which has a policy of "demonstrated competence" as the basis for awarding diplomas must be aware of the distinctions between a goal and a competency or between a competency and a performance indicator. This article lists practical guidelines and suggestions for committees charged with developing competencies required for high school graduation.

2. Adult Functional Competency: A Summary. University of Texas, Austin, Div. of Extension, March 1975. 30 pages. ED 114 609.

The Adult Performance Level (APL) project summary specifies the competencies which are functional to economic and educational success in society and describes devices developed for assessing those competencies. The APL theory of functional competency identifies adult needs in general knowledge areas (consumer economics, occupational knowledge, community resources, health, and government and law) and in primary skills (communication skills, computation skills, problem solving skills, and interpersonal relations skills). The APL project methodology involved the following activities: Specification of competencies, development of performance indicators, field test and subsequent revision, national assessment of competency, and determination of competency levels. Three APL levels are identified: APL 1--adults functioning with difficulty, APL 2--functional adults, and APL 3--proficient adults. An APL national survey (Five samples totaling 7,500 adults) on functional competency reports the competency levels of adults according to knowledge and skill areas and demographic groupings, with 20 percent falling in the APL 1 category. Additional performance data related to general knowledge areas and primary skills are provided. Possible methods for APL implementation and dissemination in the classroom, local program, State, and national levels are suggested as well as its implications for elementary and secondary education. Appended materials include additional notes on APL goals, objectives, and tasks.

3. Anderson, Earl N. Coping with Oregon's New Competency-Based Graduation Requirements--View from a Practitioner. April 1975. 13 pages. ED 105 594.

Oregon's new graduation requirements represent a bold effort to implement a mandated statewide competency-based program at the K-12 public school level. All the various ramifications of instituting a change of this magnitude cannot be predicted at this early date, but one major effect already evident in that local school districts have begun to conduct, perhaps for the first time in 40 years, a massive critical reassessment of all aspects of their educational programs. The motivating force in the reassessment process has been the need to determine procedures for

transforming the theoretical constructs set forth in the graduation requirements into operational procedures for implementation in the local districts. The major purposes of this paper are to present background information about the new Oregon graduation requirements, to identify several major problems faced by Oregon school districts in operationalizing the new graduation requirements, and to describe the role of the consortium approach in providing technical assistance to local school districts.

4. Bossone, Richard M., and Troyka, Lynn Quitman. National Conference on Minimum Competencies: Trends and Issues. Proceedings. 120 pages. ED 141 404.

On March 4, 1977, the Center for Advanced Study in Education (CASE) of the Graduate School and University Center of the City University of New York (CUNY) and the Board of Education of the City of New York co-sponsored a National Conference on Minimum Competencies: Trends and Issues. Six papers were presented: "An Overview Regarding Minimal Competencies: Problems and Opportunities", by Gordon Ambach; "The Dangers of Knowing Precise Answers to the Wrong Questions", by H.A. Wilson; "Item Characteristics and Criteria", by Donald Ross Green; "The Need for Test Security", by Anthony Polemeni; and "What Everyone Should Know About Minimum Competencies", by Richard M. Bossone and Lynn Quitman Troyka.

5. Clark, James P., and Thomson, Scott D. Competency Tests and Graduation Requirements. National Association of Secondary School Principals, 1976. 76 pages. ED 126 160. Hard copy available from NASSP, 1904 Association Drive, Reston, VA 22091.

The use of a variety of specific competency tests that measure skill achievement required for high school graduation are reviewed in this monograph. The successful performance of certain competencies ordinarily is viewed as an important adjunct of course work. They are not seen by most schools as a replacement for course work, but rather as one significant step toward giving the diploma. The monograph addresses the dual question of assisting students while at the same time insisting that the diploma regain meaning. It provides a background to the competency test movement, and reports on the initiatives taken nationwide to use applied performance tests as a requirement for graduation. Items are presented for several competency tests in current use in the areas of mathematics, reading, writing, democratic process, art, music, and money management. Appendices contain lists of states and schools using competency tests and legislation and State Board rulings concerning competency tests.



6. Competency Based Education Resource Guide. San Mateo Educational Resources Center, May 1977. 22 pages. ED 139 822.

The recently enacted California legislation commonly referred to as the Hart Bill (AB3408) requires that local district governing boards establish high school graduation requirements and standards of proficiency in basic skills. The educational system which places emphasis on the specification, learning, and demonstration of these proficiencies is commonly referred to as Competency Based Education. If the legislation is to be implemented within the required time frame, and if students are to be given a reasonable period of time to acquire or improve the proficiencies needed to obtain a diploma, districts must be provided with the necessary resources to begin this implementation immediately. Consequently, this resource guide was produced as an "emergency measure" in an effort to provide ready access to materials related to competency based education. The documents and materials referenced in this guide represent a search of ERIC and other San Mateo Educational Resources Center (SMERC) files as well as an effort to uncover competency-related materials from a number of sources both within and outside California. The literature on competency based education is not well developed or well organized. Thus the editorial group for this publication chose to include a few documents which may be indirectly helpful in developing competency based programs as well as those which deal directly with competency based education. Emphasis has been placed on the areas of reading, language arts and mathematics, but has not been limited to these fields.

7. Competency Based Education Source Book. Northwest Regional Educational Laboratory. Available in summer 1977 from: Mr. Jack McConell, Director Office of Marketing and Dissemination, Northwest Regional Educational Laboratory, 3000 Market Street, N.E., Suite 323, Salem, Oregon 97301.

The source book will contain listing of resources on competency-based education. It is currently being developed by the Northwest Regional Educational Laboratory, under a contract with the National Institute of Education.

8. Diplomas Are Good for Nothing--True or False? Updating School Board Policies. Vol. 7, No. 1, pages 1-4, January 1976. EJ 132 495.

In looking at new routes school districts are offering as a means for obtaining a high school diploma, the concept of competency-based education is emphasized.

9. Estes, Gary D., and others. A Criterion-Referenced Basic Skills Assessment Program in a Large City School System. April 1976. 20 pages. ED 124 587.

The Phoenix Union High School System has developed a basic skills assessment program in the areas of Reading and Mathematics. Procedures and considerations used in developing the system are discussed. Preliminary results on validity and reliability of the assessment instruments are presented. An example of criterion-referenced test development using traditional item analysis, reliability, and validity procedures is provided.

10. Fink, Arlene. The Use of Data from Competency-Based Measurement: An Instructional Developer's View. April 1976. 14 pages. ED 128 469.

Attention has recently been focused on the need to design and validate instructional materials that guarantee competent student performance. In preparing such products, developers have come to rely on competency-based achievement tests. Unfortunately, expertise for constructing reliable and valid competency-based instruments is not currently available in a form than an instructional developer can readily translate into practice. The formulation of objectives to guide instrument construction is problematic for the developer because few dependable rules exist to help select and state them. Formulating items is also difficult because many developers lack training in test writing. Further, major issues arise when the developer must establish the meaningfulness of the scores that result from competency-based instruments, a difficult and costly task that requires psychometric skill and a generous budget. Finally, a discerning developer knows in advance of instrument validation that little assistance will be available from psychometricians who have long been arguing over the designs and statistics to be used in validating competency-based tests. Data derived from competency-based instruments must therefore be used with caution and confirmed with additional sources of information like observations and interviews. Developers should also require test construction and psychometric expertise.

11. Fiske, Edward B. Minimum-Competency Tests for Students, an Old Idea, Now Revived and Spreading. New York Times, page B12, January 5, 1977.

The idea of establishing competency exams above and beyond regular course work is an old one that has been revived recently because of widespread public demands for accountability. The use of proficiency tests to meet these demands takes four basic forms: college graduation requirements, high school graduation requirements, "early out" exams, and grade-by-grade exams. Problems with this approach are discussed.

12. Gilman, David Alan. Minimum Competency Testing: An Insurance Policy for Survival Skills. NASSP Bulletin, Vol. 61, No. 407, pages 77-84, March 1977.

The case is stated for minimum competency testing as a requirement for high school graduation. If students are to take their places as contributing members of society, the schools must provide them with what society needs in the way of skills, knowledge, and values. In short, schools must provide students with survival skills; and the need for survival skills brings a need for proficiency testing.

13. Graduation Requirements. An NASSP Special Task Force Report. National Association of Secondary School Principals, 1975. 30 pages. ED 111 071.

This report was prepared by a special task force of the National Association of Secondary School Principals to aid professional educators and community groups who may wish to consider possible changes in high school graduation requirements. The report discusses a number of issues surrounding graduation and offers some specific recommendations concerning graduation requirements. Separate brief sections of the report examine current trends in graduation requirements, the meaning of the diploma, verification of requirements, requirements for the diploma, alternative approaches to the diploma, and articulation with postsecondary education. The appendix contains a table that summarizes 1974 graduation requirements for all 50 states.

14. Guide for an Assessment of Basic Life Skills. National Assessment of Educational Progress, May 1977. 56 pages. ED 139 819.

Basic life skill items developed by the National Assessment of Educational Progress (NAEP) to measure the achievement of 17-year-olds in the following areas are presented: (1) personal finance and consumer protection; (2) health maintenance (3) interpersonal skills; (4) family responsibility; and (5) career development. These items were constructed to measure performance on the objectives listed in Appendix B. These assessment items can be part of a pool individual teachers may choose from; they can be used as instructional tools; or they can be part of a classroom-, school-, or district-wide assessment. In the Spring of 1978, NAEP will publish nationwide results for these items. These and the results from a school or school district will allow national comparisons. The more closely NAEP procedures are replicated, the more valid will be comparisons with the national results. In addition to presenting the locations of the various items, the following information is also provided: a short general description of the item; a NAEP number useful for referring to NAEP results when they become available; an outline code referring to skill areas; and an answer key.

15. The Hart Act (AB 3408). ASCA Special Report. Vol. 6, No. 3. Association of California School Administrators, January 1977. 13 pages. ED 132 739. Hard copy available from ASCA, 1575 Old Bayshore Highway, Burlingame, CA 94010. ED 132 739.

The Hart Act, recently adopted by the state of California, mandates that school districts establish mechanisms of assessing minimal competencies in secondary education before students may receive a diploma. In this report, assemblyman Gary Hart, the bill's author, and Don McKinley, chief deputy to the Superintendent of Public Instruction, discuss the implications of the Hart Act and graduation and competency standards in general. Issues discussed include the possible de facto segregation of minorities into remedial classes and the treatment of learning handicapped students. Hart stresses the bill offers mostly recommendations and suggestions to school districts to identify students that need help in meeting minimal competencies.

16. Marlowe, John. Testing, Testing... Can You Hear Me? Phi Delta Kappan, Vol. 58, No. 3, pages 256-257, November 1976. EJ 148 045.

The inadequacies of the California High School Proficiency Examination and how it has usurped every school board's responsibility to define and implement a meaningful education are discussed.

17. Merwin, Jack C. NCME Debate--Resolved: That Measurement Issues in Competency-Based Educational Programs Are Not Different from Those in Other Kinds of Testing. April 1976. 8 pages. ED 121 855.

The proposition, "That measurement issues in competency-based educational programs (CBE) are not different from those in other kinds of testing (NCBE)" must be declared false. (1) Measurement in CBE focuses on the present while NCBE measurement focuses on information needed for future planning. (2) CBE measurement starts with definitive statements of behavior repertoires at various levels of strata and substrata of specificity. NCBE measurement starts with the need to identify aspects of current behavior predictive of the impact of educational experiences. (3) What the student is asked to do on a test in CBE is defined by behavioral objectives. In NCBE surrogate measures, highly correlated with behaviors taught for can be used to gain efficiency in measurement. (4) Adequacy of sampling of a specified behavior domain is the critical criterion for a test used in CBE. The value of a test in identifying differential impact of educational environments is a critical criterion for NCBE measures. (5) CBE measurements are used to make a two-way classification with accuracy--competent or not competent as defined by a stated standard regarding a specified behavioral repertoire. NCBE measurement normally calls for reliable identification of multiple levels of individual differences that are related to decisions that must be made.

18. Minimal Competency Measurement Conference: Summary Report. March 1976. 74 pages. ED 127 376.

On March 11 and 12, 1976, the National Assessment of Educational Progress (NAEP), a project of the Education Commission of the States (ECS), and the Clearinghouse for Applied Performance Testing (CAPT), a project of the Northwest Regional Educational Laboratory (NWREL), cohosted a Minimal Competency Measurement Conference in Denver, Colorado. Representatives of 32 states, the District of Columbia, and Puerto Rico attended. The conference provided a forum to discuss minimal competency in its broadest sense. The scope of the meeting was loosely defined in order to maximize participant output. Hosts and participants alike were asked to share their thinking on a variety of complex issues that relate to minimal competency. Presented here is a brief summary of the conference proceedings--the topics that were discussed, the information that was shared, and the questions that were raised.

19. Oliver, Gordon. School Graduation Requirements in Oregon. A Discussion of the Events Surrounding the 1972 Change in Requirements. Oregon State Dept. of Education, September 1974. 99 pages. ED 098 663.

The Oregon school graduation requirements, the trends and events that led to their development, and the implementation program that followed their adoption are the subjects of this report. The requirements, adopted in September 1972, call for districts to establish minimum "survival level" competencies that each student must meet in addition to completing modified requirements in designated course and attendance areas. A number of educational trends contributed to the development of the requirements; many of these emerged in meetings and studies that preceded adoption of the requirements. The major implementation actions of the State Department of Education and of several of the State's school districts are reviewed. Arguments for and against accountability in education and competency-based educational programs are also discussed, accompanied by suggested options for future research into the effectiveness of the State's competency-based education. The implementation program of the Albany Union High School District and its relation to actions by the Department of Education are reviewed in an appendix to the main report.

20. Olson, Thomas A. Coping with the Instructional Dimensions of Competency-Based Graduation Requirements. April 1975. 9 pages. ED 108 393.

The Oregon competency-based graduation requirements--survival competencies--are motivated not so much by public demands for accountability in the normal sense of improved "efficiency" as by the desire to bring about a greater range of alternative learning settings and experiences. There are two sets of research and development questions related to the instructional dimensions of the graduation requirements. One set deals with technical and process concerns such as setting goals, finding adequate assessment and evaluation

devices, and establishing improved procedures for instructional design. The second set of questions centers on potential modifications in interactions of roles and responsibilities among individuals and institutions as schools plan to meet the instructional dimensions of the graduation requirements.

21. Oregon Graduation Requirements: Administrative Guidelines. Section I. Oregon State Dept. of Education, September 1973. 55 pages. ED 085 864.

Since 1969, the Oregon State Board of Education has undertaken to reverse the trend toward providing a single, rigid program for all students, regardless of their abilities, interests, needs, or learning styles. The new standards focus on the concept of providing students an opportunity to learn and demonstrate specific "survival" competencies. Each district must clarify the point of view of "survival" to its own satisfaction in order to identify the basic skills and abilities that all students should acquire as a result of public schooling. Developing a plan for meeting new State requirements for school graduation is an important task for local school districts. These guidelines suggest practical, economical, and flexible approaches.

22. Oregon Graduation Requirements: Guidelines for Record Keeping Procedures and Sample Forms. Oregon State Dept. of Education, 1974. 34 pages. ED 109 750.

These guidelines and sample forms for record keeping are intended to serve as a supplement to Oregon Graduation Requirements, Administrative Guidelines, Section 1 (ED 085 864), which was published in September 1973. The purposes of the guidelines and sample forms are to outline various record-keeping procedures and to provide sample forms that districts may adopt or adapt when implementing the new graduation requirements. The options presented in the guide give districts the flexibility to develop record-keeping procedures consistent with district needs, preferences, and resources. The district's record-keeping plan should assure that the necessary information regarding credits earned, competencies completed, and attendance requirements met by each student is readily available when needed. The district may continue its existing procedures for recording credits earned and attendance requirements met by students. The task remaining is to supplement those procedures with a means to record the third component of the minimum graduation requirements: minimum survival level competencies.

23. Pipho, Chris. Minimal Competency Testing: A Look at State Standards. Educational Leadership, Vol. 34, No. 7, pages 516-520, April 1977.

The variety of forms of state legislation which require some type of minimal competency standards are listed by state and discussed. Questions about such programs are grouped under five headings: (1) Minimum Proficiency Skills; (2) Testing; (3) Finance; (4) Students; and (5) Staff.



24. Pipho, Chris. Update VI: Minimal Competency Testing. 39 pages.  
Available from: Education Commission of the States (ECS), 1860  
Lincoln Street, Denver, CO 80203

By June 1st of the 1977 legislative season, 24 states had introduced 67 bills related to minimal competency testing for high school graduation and grade-to-grade promotion. Federal legislation requiring state education agencies to establish basic standards of educational proficiency for high school graduation has also been introduced by Congressman Ronald M. Mottl. This update of an earlier report lists state legislative activity through June, 1977; and a copy of the proposed federal legislation is appended.

25. Polgar, Ellen. The California High School Proficiency Exam. June 1976.  
129 pages. ED 129 859..

The California High School Proficiency Exam (CHSPE) allows a 16- or 17-year old who passes it to leave school as early as age 15, with parental permission, earning the legal equivalent of a diploma. The exam focuses on basic reading and computing skills. In this study, a variety of findings are reported. School districts have a budgetary disincentive to be receptive to the CHSPE, because every student who exits early results in revenue losses to the district. A long-range budgetary effect of the CHSPE is to shorten the period of total schooling time and result in potential net savings to the state. Choices outside the high school may be limited for CHSPE certificate-holders. Those who pass the exam and stay in school can take more pleasurable courses, yet not worry about making up or taking more required courses. The survey that is included here was used to obtain a profile of the students who do take the exam.

26. Sensenbaugh, James A. Basic Proficiency Examination from High School. Journal of the International Association of Pupil Personnel Workers, Vol. 20, No. 4, pages 200-203, September 1976. EJ 144 363.

A review of requirements for exit examinations for high school seniors, and a discussion of the disadvantages and alternatives to the exams are presented.

27. Taylor, Bob L. Will the Oregon Graduation Requirements Law Set New Directions for the Nation's Secondary Schools? North Central Association Quarterly, Vol. 50, No. 3, pages 321-327, Winter 1976. EJ 144 100.

To determine the status of the Oregon Graduation Requirements Law and the directions being taken in its implementation, a site visit was made to Oregon, and educators in a number of school districts were interviewed. Also samples of curriculum guides and administrative reports were collected and studied.

28. Thieleke, Gene A. Graduation Requirements: What Are the Trends?  
Bloomfield Hills Public Schools Graduation Requirements, 1976 - Present.  
February 1976. 13 pages. ED 123 731.

This document presents the graduation requirements of the Bloomfield Hills public schools. It includes the credits that must be earned in grades 10-12 and the minimum competencies that must be achieved in each of 14 areas, including measurement skills, speaking skills, communication skills, employment and career skills, and physical fitness.



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